Boucher, Aimee

From: Fagel, Jason R (DEC) <jason.fagel@dec.ny.gov>

Sent: Thursday, September 13, 2018 5:13 PM **To:** Boucher, Aimee; Sexton-sims, Aisha

Cc: Sarah Rickard

Subject: TMDLs for Peach Lake and Minor Tribs to Croton Falls Reservoir

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Aimee/Aisha,

Through the comments submitted on 8/6/18, EPA Region 2 questioned the IR Category 4a placements for Peach Lake (1302-0004) and Minor Tribs to Croton Falls Reservoir (1302-0001) and the applicability of TMDLs cited by NYSDEC for these waters.

The Phase II Phosphorus Total Maximum Daily Loads For Reservoirs In The New York City Water Supply Watershed was issued June 2000 and was approved by USEPA Region 2 in October 2000. This TMDL is specific to a number of NYC-owned drinking water reservoirs in the in the lower Hudson River Watershed, including the Croton Falls Reservoir. The waste load allocations (WLAs) for the Croton Falls Reservoir involve no current dischargers to the reservoir itself, but instead regulate phosphorus loads to various minor tributaries in the reservoir's watershed. The Croton Falls Reservoir WLAs are detailed in the table below (TMDL p26):

Facility Name	Permit No.	Current Phosphorus Load (Kg/yr)	NYC Rules and Regulations Phosphorus Loadings			Permit Flow (GPD)	Notes (not in TMDL table)
			Kg/yr	lbs/day	mg/L		
Carmel SD #2	003 1356	945	305	1.8	0.2	1,100,000	Receiving water: Michaels Br.
The Fairways	016 5719	15	45	0.27	0.5	65,000	Receiving water: Trib of Michaels Br.
Fulmar Rd. Elem. School	002 9386	4	27	0.2	1.0	19,400	Receiving water: Trib of Mud Pond Br.
Lake Plaza	014 3693	3	28	0.2	1.0	20,000	Receiving water: Trib of Mud Pond Br., Now sewered to Mahopac STP, no longer discharging
Mahopac STP	002 6590	605	208	1.3	0.5	300,000	Receiving water: Mud Pond Br.
Putnam Hospital Center	009 5672	137	0	0.3	1.0	30,000	Receiving water: Croton Falls Res., Now sewered to Carmel SD#2, no longer discharging

Ralph Morando Bldg.	006 2561	1	2	0.02	1.0	1,800	Receiving water: Mud Pond Br., Now sewered to Mahopac STP, no longer discharging
Basin Totals		1,710	615	4.1		1.54 MGD	

The Minor Tribs to Croton Falls Reservoir (1302-0001) segment includes Michaels Brook and its tribs. The Mud Pond Brook and tribs (1302-0099) are a separate segment, not impaired by TP, not Listed. Per the TMDL, we are already regulating phosphorus discharges in all the tribs of segment 1302-0001. The load allocations from the TMDL apply to the whole watershed of the reservoir, including the subject tribs. What more can or should NYSDEC be doing to control phosphorus in this segment? What benefits are realized by adding this segment to the 303(d) List for phosphorus? What modifications are needed to this TMDL so it covers segment 1302-0001?

The Total Maximum Daily Load (TMDL) for Phosphorus in Peach Lake was issued in November 2009 and was approved by USEPA Region 2 in March 2010. Per the TMDL analysis, the primary phosphorus load to the lake were failing septic systems (68.5%) and the TMDL prescribed load allocation for septic systems was 0. All the septic systems around the lake were eliminated and sewers were installed. The receiving WWTP discharges outside the Peach Lake watershed. Pathogens were not detailed or analyzed in the TMDL process, but none of the additional phosphorus sources cited in the TMDL are typically associated with pathogen loads greater than those conveyed through failing septic systems. In NYSDEC's opinion, the pathogen problem in Peach Lake was coincidentally solved while remedying the phosphorus issue. We have preliminary data (but not enough to update the assessment) showing that fecal coliform concentrations in the lake are no longer an issue. So this too boils down to a question of what benefits are realized by adding this segment to the 303(d) List? Placing Peach Lake in IR 4a for pathogens may not fit the letter of the guidance, but placing it elsewhere does not make much sense.

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